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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,839

12/17/2003

Sung-Hca Cho

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EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

06/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/736,839	<b>Applicant(s)</b> CHO ET AL.	
	<b>Examiner</b> Leonard J. Weinstein	<b>Art Unit</b> 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 27-33 is/are allowed.
- 6) ☒ Claim(s) 11-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/01/2007 &amp; 04/12/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This office action is in response to the amendment of March 8, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 11 and 17-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Cho et al. 2004/0071560.

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. Cho teaches all the limitations as claimed for a rotary compressor comprising a rotating shaft 301 having first 301a and second 301b eccentric parts which rotate thereby, a first compression chamber 308a in which a refrigerant compression stroke (fig. 4) or an idle stroke (figs. 5-6) is performed in accordance with a first rotating direction, a clockwise rotation as shown in figure 4 for a compression stroke, or a second rotating direction, a counterclockwise movement as shown in figures 5-6 for an idle stroke, of the first eccentric part 301a of the rotating shaft 301 to selectively compress a refrigerant in the first compression chamber 308a, a second compression chamber 308b in which the refrigerant compression stroke (fig. 7) or the idle stroke (fig. 8) is performed in accordance with the first

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rotating direction, a clockwise movement as shown in figure 8 for an idle stroke, or the second rotating direction, a counterclockwise movement as shown in figure 7 for a compression stroke, of the second eccentric part 301b of the rotating shaft 301 to selectively compress a refrigerant in the second compression chamber 308b, such that first 308a and second 308b compression chambers alternately perform the refrigerant compression stroke and the idle stroke (§ 0045), and a compression capacity controller, as composed by 501, 502, 701, and 702, to control a compression of the first compression chamber 308a (pg. 4, col. 2, § 0051); a compressor provided with first 308a and second 308b compression chambers having different compression capacities from each other (pg. 4, col. 2, ll. 13-19, § 0051); a second compression chamber 308b having a compression capacity smaller than that of the first compression chamber 308a (pg. 4, col. 2, ll. 13-19, § 0051); a second compression chamber 308b has a compression capacity about a half of a compression capacity of the first compression chamber 308a (pg. 4, col. 2, ll. 13-19, § 0051); a first roller piston 305a fitting over the first eccentric part 301a of the rotating shaft 301 in the first compression chamber 308a, a first gap (figs. 4-6) defined between the first roller piston 305a and the first eccentric part 301a, and eccentric in a shape thereof, and a first cam bush 306a having an eccentric shape and fitting in the first eccentric gap between the first eccentric part 301a and the first roller piston 305a in the first compression chamber 301a; a compressor wherein when the rotating shaft 301 rotates in the first rotating direction, clockwise as shown in figure 4, the first cam bush 306a causes an eccentric rotation of the first roller piston 305a to perform the compression stroke in the first compression chamber 301a and when the rotating shaft 301 rotates in the second rotating direction, counterclockwise as shown in figures 5-6, the first cam bush 306a causes a concentric rotation (fig. 6) of the first roller piston 305a to perform the idle stroke in the first compression

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chamber 301a as discussed above; a second roller piston 305b fitting over the second eccentric part 301b of the rotating shaft 301 in the second compression chamber 308b, a second gap defined between the second roller piston 305b and the second eccentric part 301b, and eccentric in a shape thereof, and a second cam bush 306b having an eccentric shape and fitting in the second eccentric gap between the second eccentric part 301b and the second roller piston 305b in the second compression chamber 301b; and a compressor, as discussed above, wherein when the rotating shaft rotates in the second rotating direction, counterclockwise as shown in figure 7, the second cam bush 306b causes an eccentric rotation of the second roller piston 305b to perform the compression stroke in the second compression chamber 301b and when the rotating shaft rotates in the first rotating direction, clockwise as shown in figure 8, the second cam bush 306b causes a concentric rotation of the second roller piston 305b to perform the idle stroke in the second compression chamber 301b.

***Allowable Subject Matter***

4. Claims 1-10 and 27-33 are allowed.
5. Claims 12-16 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments, see pages 10-11, filed March 8, 2007, with respect to the 102(b) rejection of claims 11-21, 23, 26-28 and 31-32 in the Office Action of December 19, 2006 have been fully considered, it follows that:
  - a. Applicant's arguments with respect to the rejection(s) of claim(s) 11-21 and 23 under 102(b) have been fully considered and are persuasive. Therefore, the

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rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Cho et al. 2004/0071560 under 102(e).

- b. Applicant's arguments with respect to claim(s) 26-28 and 31-32 have been fully considered and are persuasive. The rejection of claims 26-28 and 31-32 under 102(b) has been withdrawn.

7. Applicant's arguments, see pages 12-13, with respect to the 102(e) rejection of claims 1, 11, 20, 23, 27 and 31-32 in the Office Action of December 19, 2006 have been fully considered, it follows that:

- a. Applicant's arguments with respect to claims 1, 27, and 31-32 have been fully considered and are persuasive. The rejection of claims 1, 27, and 31-32 under 102(e) has been withdrawn.
- b. Applicant's arguments with regards to claims 11, 20, and 23 rejected under 102(e) in view of Cho et al. 2004/0071560 have been fully considered but they are not persuasive. Cho teaches all the limitations as claimed and discussed above.

8. Applicant's arguments, see pages 13-14, with respect to the 103(a) rejection of claims 1-10, 22, 24-25, 29, 30, and 33 in the Office Action of December 19, 2006 have been fully considered, it follows that:

- a. Applicant's arguments with respect to claims 1-10, 29-30, and 31 have been fully considered and are persuasive. The rejection of these claims under 103(a) has been withdrawn.
- b. Applicant's arguments with respect to the rejection(s) of claim(s) 22 and 24-25 under 103(a) have been fully considered and are persuasive. Therefore, the

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rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Cho et al. 2004/0071560.

***Conclusion***

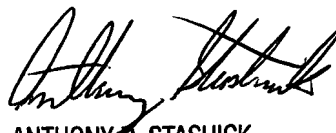
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are cited on form 892 herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
LJW

  
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